



City of  
Columbia Heights  
Community Development

# Roofing Permit Requirements

The following information must be submitted to the Building Official before a building permit can be approved and processed. A more detailed description of items 1-4 is listed.

1. **Building Permit Application form.**
2. **Existing Roof Information sheet**
3. **Miscellaneous as required**
4. **Required Inspections**

1. **Building Permit Application:**

Complete and sign a building permit application form. Forms are available at the Community Development Department or on-line at [www.ci.columbia-heights.mn.us/city\\_services/building\\_permits.asp](http://www.ci.columbia-heights.mn.us/city_services/building_permits.asp) After a preliminary review additional information may be required.

2. **Miscellaneous as required:**

**Permit Fees:** Building Permit fees will be determined after the application and required information sheet has been approved.

**Building Inspection Card:** Must be posted on the construction site, preferable inside the front storm door for easy access by the Building Inspector.

**Ice and Water Barrier:** Either arrange for an Ice and Water Barrier inspection at time of application or take photos showing the installation of the Ice and Water Barrier. All locations should be depicted in the photos. The Ice and Water Barrier is required on all heated structures. The Ice and Water Barrier is to be installed from the eave line to a minimum of twenty-four (24) inches inside the interior face of the exterior wall. **On 1-1/2 story residences it is recommended by the Building Official** that the Ice and Water Barrier extend from the eave line to a minimum of 24" inside the knee wall of the second story.

3. **Required Inspections:**

Only two inspections are required for the majority of roofing projects. The Ice and Water Barrier and final. However, if roof sheathing is replaced an inspection is required before it is covered. Installer may utilize photographs of the installation of the Ice and Water Barrier and sheathing in lieu of an inspection provided the photographs show the extent of each. Upon completion of the project call for inspection and post the Building Inspection Card with attached photos.

Inspections: Call (763) 706-3678 between 8:00 AM and 4:45 PM Monday through Friday to schedule the inspections needed for your project. Allow 2 to 3 days for scheduling.

## **SHEATHING**

Roof sheathing shall be checked prior to re-roofing and repaired or replaced if rotted or unsound. Replacement sheathing shall conform to the requirements of the building code. Check manufacturer's installation instructions for sheathing/decking requirements.

## **ROOF PITCH**

Asphalt shingles shall not be used on roofs with less than a 2:12 pitch (2" rise in 12" horizontal) and require special application procedures for pitches less than 4:12. Manufacturer's instructions on package must be followed.

## **FASTENERS**

Asphalt shingles shall be fastened with not less than four nails or approved staples. Nails shall not be less than 12 gauge with 3/8-inch minimum diameter head. Staples shall not be less than 16 gauge with 15/16-inch crown width. Nails or staples shall be of sufficient length to penetrate through roofing material and at least 3/4 inch driven so that it tightly bears against the shingle but does not cut the surface of the shingle. Crown shall be parallel to the long dimension of the shingle. Nails or staples must be installed in the location on each shingle per the manufacturer's instructions. Any crooked fasteners should be removed and replaced.

## **UNDERLAYMENT** (See manufacturer's installation instructions)

- A. For roof pitches from 2:12 to less than 4:12: Two layers of 15# felt applied shingle fashion. Starting with an 18-inch wide sheet and a 36-inch wide sheet over it at the eaves. Each subsequent sheet shall be lapped 19-inches horizontally.
- B. For roof pitches 4:12 and over: One layer of 15# felt lapped two inches horizontally and four-inches vertically.

## **ICE DAM PROTECTION MEMBRANES**

- A. **For roof pitches of 2:12 to less than 4:12:** Same as for UNDERLAYMENT and additionally, an approved waterproofing underlayment shall be installed to no less than twenty-four (24)-inches inside the interior face of the exterior wall line. This product must be installed per the manufacturer's instructions.
- B. **For roof pitches of 4:12 or greater:** Same as for UNDERLAYMENT and additionally, a manufactured ice-dam protection membrane or its code approved equivalent assembly must be installed per manufacturer's instructions including but not limited to: the membrane shall extend from over the metal or wood drip edge to a point not less than 24-inches measured horizontally inside the interior face of the exterior wall line. Typically, two rows (six feet) are required but more than two rows may be required depending on the size of the soffit overhang. The underlayments must extend to the outer edge at all fascia boards.

## **VALLEY FLASHING**

When existing flashing is no longer serviceable it shall be replaced. Valley flashing shall consist of not less than No.26 galvanized sheet gauge corrosion resistant metal. The metal shall extend at least 8-inches from the centerline each way. Sections of flashing shall have an end lap of not less than 4-inches. Alternately, the valley may consist of woven asphalt shingles or closed-cut style applied in accordance with the manufacturer's instructions

## **VALLEY UNDERLAYMENT**

A 36-inch wide strip of 15# felt shall be centered in the valley on top of the underlayment required for the entire roof. For roof slopes of less than 7:12, an approved manufactured ice-dam protection membrane must be installed directly to the sheathing for the entire length of the valley.

## **OTHER FLASHING**

All other flashing and roof vents shall be checked and if rusted or in bad condition shall be replaced. When replacing flashing of metal, it shall be of not less than No.26 gauge corrosion-resistant metal. Roof vents and other flashing must be installed according to manufacturer's instructions. Generally,

all require the bottom part of the vent to be placed above the shingles so that about half of the vent is above the lower shingles and half is below the upper most shingles. Any replacement of flashing at masonry chimneys must be properly cut in and re-tuckpointed or caulked with an approved product.

### **ROOF AND SOFFIT VENTS**

If necessary, additional roof and soffit vents must be installed so that for every 300 square feet of attic area there is at least one-square foot of ventilation. 50% of the required area shall be in the soffit and the remaining 50% shall be in the upper one-third of the roof. If venting is only feasible in the roof the ratio is 1 square foot of ventilation for every 150 square foot of attic area.

### **EXHAUST VENTS**

Care should be taken to insure that kitchen and bathroom exhaust fan pipes are connected to the appropriate dampered exhaust roof vent with no openings into the attic that would allow exhaust air back into the attic space. The exhaust vents should be installed on the roof the same as other attic vents and other vent pipe flashing.

When re-roofing around furnace flues, take care to not dislodge the joints of the flue pipe within the attic or within interior chases this pipe might pass through. Also, verify you have a listed vent cap or remove the old one. If in doubt, consult a licensed heating contractor.

### **KICK-OUT FLASHING:**

Kick-out flashing required at intersection of roof and wall line where an adjacent wall extends beyond the eave line.

### **REROOFING:**

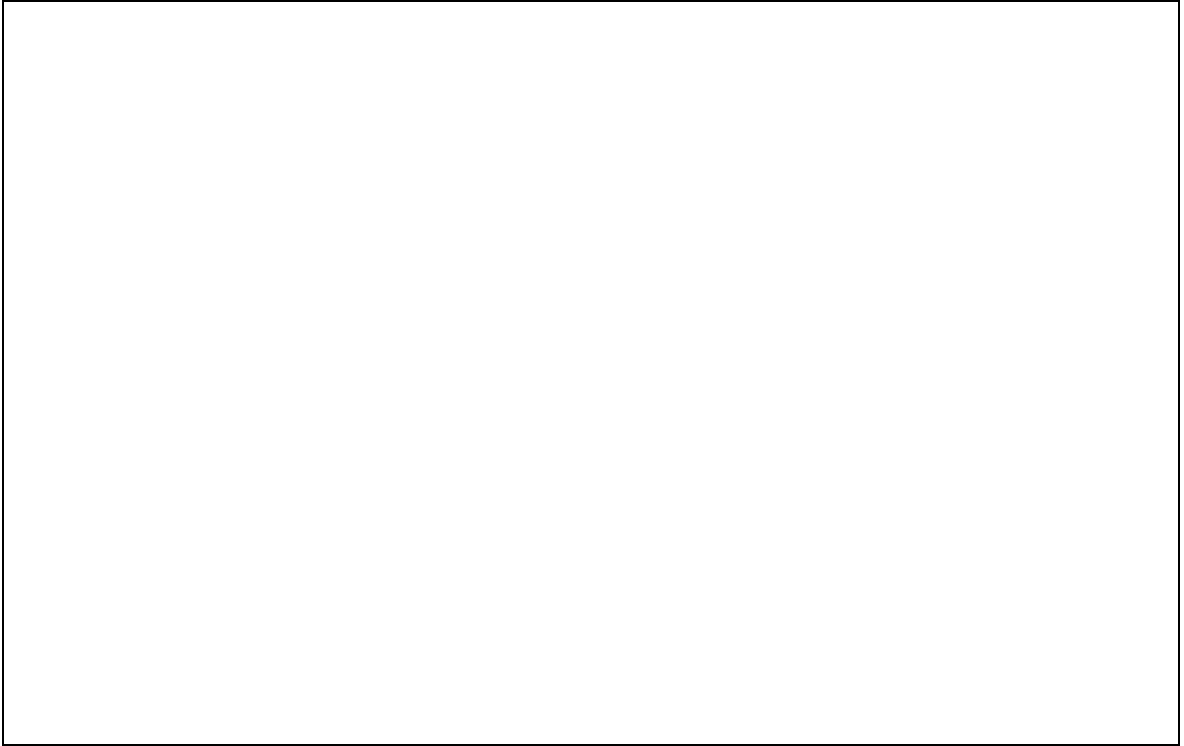
Recovering versus replacement: New roof covering s shall not be installed without first removing all existing layers of roof coverings where any of the following conditions exist:

1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

# Existing Roof Information Sheet

Required with permit application

4. **Drawing/Sketch/Photos:** (Optional) Provide a drawing/Sketch of the existing roof in plan view or provide photos of the existing roof. Drawing/Sketch/photos should show the location of valleys, ridges, existing roof vents, flues, chimneys, plumbing vents, power vents, etc. This information will allow the reviewer to point out areas of concern before they become issues.



5. **Roof Pitch:** What is the existing roof pitch? \_\_\_\_\_ (IE: 4:12, 6:12; etc.) This is required to assure proper application of roofing materials.
6. **Shingle Manufacturer/Product:** Name of the manufacturer, style and weight of shingle to be used. \_\_\_\_\_
7. **Ice and Water Barrier:** Name of the manufacturer and weight of the ice and water barrier: \_\_\_\_\_
8. **Staples/Nails:** Which type will be used    Nails ☐    Staples ☐ (check one)
9. **Roof Vents:** Name of the manufacturer and model of roof vent to be used.  
\_\_\_\_\_ Net Free area of vent \_\_\_\_\_ Sq. Ft.
10. **Extended eave lines:** Do any areas of the roof have extended eaves? Please show on the plan/sketch above. (IE: covered porches, alcoves, etc.)